AMENDMENTS TO THE SPECIFICATION

Page 4

Amend the paragraph beginning on line 21 as follows:

My prior U.S. Patent 6,386,131 incorporates the aforementioned key performance characteristics and requirements. However, the hull of my prior patent is applicable only for straight body hull shapes with a ~~blocking factor~~ block coefficient ~ 1. According to the instant invention, the hull, contrary to my aforementioned prior U.S. patent, uses a composite with a light framing on the inside of the composite for the mid-body section which transmits the sea loads to a longitudinal framing or bulkheads, which together with the deck and bottom carry the major loading whereby the light framing on the inside of the composite transmits the sea loads to the longitudinal framing or bulkheads. The instant invention is for Naval combatants that require a curved mid-body section with a block coefficient ~ 0.5, such as in a destroyer artistically represented in Figure 1 of this application. The curved mid-body results in increased fuel efficiency and speed, in addition to other hydrodynamic advantages. The wider mid-body would also result in increased resistance to sea loading and whipping moments. According to this invention, the curved mid-body is made of a hybrid composite and light framing on the inside thereof for transmitting the water pressure loading to an inner straight framing or an inner straight longitudinal bulkhead. The global hull-girder-loads are therefore resisted in this invention by the inner longitudinal-framing or longitudinal bulkheads.

Page 7

Amend the paragraph beginning on line 4 as follows:

Figure 1 is an artistic perspective rendition of a Navy combatant with a fine bow providing a low ~~blocking factor~~ block coefficient of ~0.5 and with a curved mid-body section according to this invention;

Page 8

Amend the paragraph beginning on line 8 as follows:

Referring now to the drawing wherein like reference numerals are used throughout the various views to designate like parts, and more particularly to Figure 1, this figure represents an artistic rendition of a combatant Naval ship embodying a hull construction according to the present invention. The schematically illustrated Navy combatant of Figure 1 includes a fine bow with a low ~~blocking factor~~ block coefficient of ~ 0.5 as well as a curved mid-body section according to this invention.

Page 9

Amend the paragraph beginning on line 3 as follows:

Figure 2 illustrates a typical transverse cross section through the hybrid hull construction of Figure 1A in which the stainless steel vertical and cross-framing **5** carries the hull-girder loads while the stainless steel longitudinal framing **6** also carries the main hull-girder loads. Reference numeral **7** generally designates composite outer shells made of known E- or S-2 glass fiber composites whereby a light framing **8** of stainless steel on the inside of these outer shells **7** transmits the

pressure loads. Metallic sandwich constructions **9**, which use a core of metal foams, stainless steel microtrusses, folded plates such as NAVTRUSS® or honeycomb, are used for the upper and intermediate decks **15** and **16** to provide protection against shocks. The decks **15** and **16** may also be made of composite materials similar to the outer skin composites. An elastomeric material **10**, for example, Crestomer® or Versalink®, is backing the composites at the framing. The upper and intermediate decks **15** and **16** are thereby preferably made of composites.

Amend the paragraph beginning on line 20 as follows:

Figure 3 is a somewhat schematic transverse cross-sectional view through the hull mid-section of the embodiment of Figure 1B which again includes outer shells **7** made of composite materials such as known E- or S-2 glass fiber composites that are supported on the inside by a stainless steel light framing **8** for transmitting pressure loads. The upper and intermediate decks **15** and **16** are again of metallic sandwich construction **9** which use a core of metal foams, stainless steel microtrusses, folded plates, such as NAVTRUSS® or honeycomb, to provide protection against shocks. However, the decks may also be made of composite material similar to the outer skin composites. Reference numeral **10** again designates an elastomeric material, such as Crestomer® or Versalink® that backs the composite at the framing. The upper deck **15** is thereby preferably made of a composite material which is also the case of the intermediate deck **16**. The longitudinal girders **17** are of known modified double-hull construction and the bottom **18** is also of modified double-hull construction while the sides **19** of the longitudinal bulkheads involve single-side plating with longitudinal stiffeners.

Page 10

Amend the paragraph beginning on line 21 as follows:

Figure 5A is an enlarged cross-sectional view in the area of circle **G** of either Figure 2 or Figure 3 and includes a stainless steel stiffener **8** which may be in the form of a box (Figure 5B) or channel member (Figure 5C). The elastomer ~~**20**~~ **10** connects the stainless steel stiffener **8** with the outer shell **7** with the use of a fastener assembly that includes a stainless steel bolt **22** embedded in the composite which cooperates with a high-strength spring **23** that is prestressed with the use of nut **24**.

Page 12

Amend the paragraph beginning on line 7 as follows:

A further advantage of this invention resides in the recognition that stainless steel advanced double-hull constructions, though they have lower magnetic signature, could not be built economically for a ship with a low ~~blocking factor~~ block coefficient, i.e., a fine bow with curved mid-section. The hybrid hull of this invention with composite bow and stern allows the manufacture of any shape necessary for meeting signature requirements at a much lower cost. Furthermore, the light-weight stern and bow lead to superior sea keeping, maneuvering, fuel efficiency and speed, in addition to reducing the whipping moments in underwater explosions. The use of a composite skin and of stainless steel inner framing for the mid-section offers lighter weight and lower cost than a stainless steel advanced double-hull construction.